

Version with markings to show changes made

In the specification:

The paragraph beginning at page 48, line 14 has been amended as follows:

-- A derivative nucleic acid is a nucleic acid which includes a capture tag sequence at one or both of its termini in a single strand overhang. The derivative sequence is produced only upon the hybridization of a probe, which include the sequence tag as an internal fragment [hybridizes], to the target sequence for which it is specific. --

The paragraph beginning at page 49, line 10 has been amended as follows:

-- The capture tags used in methods of the invention are initially supplied as internal sequences, i.e., they are flanked on both sides with other sequences. Only after a target sequence specific reaction are tags found at the terminus of a nucleic acid. The internal positioning makes it very difficult for un-reacted tag-[continuing] containing probes to hybridize to a capture probe. On the contrary, reacted molecules, which present the tag sequence at a terminus, hybridize readily with capture probes, particularly partially duplex probes having a single strand over hang which is complementary with a tag sequence. --

In the claims:

Claim 1 has been amended as follows:

1. (first amended) A method [for multiplexed analysis] of analyzing a plurality of target nucleic acid sequences in a sample, the method comprising [the steps of]:

providing, for each target nucleic acid sequence to be analyzed, at least one probe/primer molecule which probe/primer molecule includes a region of sequence substantially complementary to a sequence in the target nucleic acid sequence and a region that is not located at either terminus of the probe/primer and which includes a capture tag sequence;

forming a reaction mixture which includes the probe/primer molecules and the target sequences under conditions such that, if a probe/primer molecule specific for a target sequence and that target sequence are both present, one or a plurality of derivative molecules having a

Applicant : David F. Englert
Serial No. : 09/616,787
Filed : July 14, 2000
Page : 8

Attorney's Docket No.: 10296-050001 / PKP-052

capture tag at one or both its 3' or 5' termini, of the probe specific for the target sequence, is generated[, thereby producing a derivative nucleic acid suitable for evaluation]; and

evaluating the presence of one or more [capture sequence tags] derivative molecules, each derivative molecule indicating a target nucleic acid sequence in the sample, thereby analyzing the plurality of target nucleic acid sequences in the sample.